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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
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08/894,351 10/27/97 REDECKER

K 306.35565X00

PM82/0505
ANTONELLI TERRY STOUT & KRAUS
1300 NORTH SEVENTEENTH STREET
SUITE 1800
ARLINGTON VA 22209

EXAMINER

MILLER, E

ART UNIT	PAPER NUMBER
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3641

DATE MAILED:

05/05/00

16

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary	Applicati n No. 08/894,351	Applicant(s) REDECKER ET AL.	
	Examiner Edward A. Miller	Art Unit 3641	

-- The MAILING DATE of this communication appears on th cover sheet with the correspondence address --

Period f r Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).

Status

- 1) ☒ Responsive to communication(s) filed on 21 January 2000 .
- 2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-30 is/are pending in the application.
- 4a) Of the above claim(s) 5, 6, 8, 12, 13, 15, 17, 18, 25, 26 and 28-30 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4, 7, 9-11, 14, 16 and 27 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claims _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are objected to by the Examiner.
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).
- a) ☐ All b) ☐ Some * c) ☐ None of the CERTIFIED copies of the priority documents have been:
1. ☐ received.
2. ☐ received in Application No. (Series Code / Serial Number) _____ .
3. ☐ received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. & 119(e).

Attachment(s)

- | | |
|---|---|
| 14) <input type="checkbox"/> Notice of References Cited (PTO-892) | 17) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ . |
| 15) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 18) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 16) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ . | 19) <input type="checkbox"/> Other: _____ . |

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1. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
2. Claims 1-4, 7, 9-11, 14, 16 and 27 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

These claims, although improved, remain indefinite such that it cannot be determined what the intended invention is. In claim 1, there is no antecedent basis for the claim 2, line 5 "tetrazole derivatives", since "derivatives" in claim 1 was cancelled. In claim 2, third from the last line, "is substituted," with what? Throughout the claims, such as at claim 4, lines 3-4 and thereafter line 5 to the end of the claim, it is not possible to determine if the second specifically listed language is intended, or if the general case of lines 3-4 is intended. A broad range or limitation together with a narrow range or limitation that falls within the broad range or limitation (in the same claim) is considered indefinite, since the resulting claim does not clearly set forth the metes and bounds of the patent protection desired. Note the explanation given by the Board of Patent Appeals and Interferences in *Ex parte Wu*, 10 USPQ2d 2031, 2033 (Bd. Pat. App. & Inter. 1989), as to where broad language is followed by "such as" and then narrow language. The Board stated that this can render a claim indefinite by raising a question or doubt as to whether the feature introduced by such language is (a) merely exemplary of the remainder of the claim, and therefore not required, or (b) a required feature of the claims. Note also, for example, the decisions of *Ex parte Steigewald*, 131 USPQ 74 (Bd. App. 1961); *Ex parte Hall*, 83 USPQ 38 (Bd. App. 1948); and *Ex parte Hasche*, 86 USPQ 481 (Bd. App. 1949). In the present instance, claim 4 recites the broad recitation tetrazole

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derivatives, and the claim also recites a Markush group, which is the narrower statement of the range/limitation. This is inconsistent, whereby the claims as a whole are indefinite. Claim 10 is indefinite. The catalyst language throughout is indefinite and cannot be understood. These remain exemplary, only, and are not exhaustive.

3. Claims 1-4, 7, 9-11, 14, 16 and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Blau et al., in view of Lund et al. '059, Wardle et al., Highsmith et al., and Yoshida et al. '446.

Blau et al. teach the basic invention which includes tetrazole fuel, e.g., with various oxidizers, including metal oxides, metal peroxides, perchlorates, nitrates, and mixtures thereof. Note the Abstract and col. 2, lines 30-32, e.g. Further detail is found at col. 5, lines 22-55 for fuels, and oxidizers at col. 6, lines 1-21, and additives at col. 6, lines 31-57. Substitution of specific notoriously well known ingredients, amounts or specific mixtures thereof would have been obvious to one of ordinary skill in the art. Note Lund et al. '059 col. 5, lines 1-50 e.g., as well as "Table 3" with a plurality of oxidizers. Wardle et al. teach zinc peroxide at col. 3, lines 20 and 22. Highsmith et al. generally suggests mixtures and the examples teach a plurality of oxidizers, e.g. Yoshida et al. '446, is further relevant, showing three oxidizers in "Table 1", "Example 15", e.g. This also shows ADCA, evidently a derivative of at least one of the recited fuels in claim 1, and thus also possibly being, in view of the indefiniteness of the claims, the epitome of obviousness, anticipation. It is well settled that optimizing a result effective variable is well within the expected ability of a person or ordinary skill in the art. *In re Boesch*, 617 F. 2d 272, 205 USPQ 215 (CCPA 1980), *In re Aller*, 220 F. 2d 454, 105 USPQ 233 (CCPA 1955).

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4. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

5. Any inquiry concerning either this or an earlier communication from the Examiner should be directed to Examiner Edward A. Miller at (703) 306-4163.

Examiner Miller may normally be reached daily, except alternate Fridays, from 9 AM to 6 PM.

If attempts to reach Examiner Miller by telephone are unsuccessful, his supervisor Mr. Jordan can be reached at (703) 306-4159. The Group fax number is (703) 305-7687.

If there is no answer, or for any inquiry of a general nature or relating to the application status, please call the Group receptionist at (703) 308-1113.

Miller/em
May 4, 2000



EDWARD A. MILLER
PRIMARY EXAMINER